IN THE CLAIMS

1.- 80. (canceled)

81. (previously presented) A process for the production of recombinant catalytically active two chain urokinase (tc-uPA) into the culture medium of an eukaryotic cell line which has been genetically transfected with a cDNA sequence encoding for a urokinase precursor wherein alkanoic acids selected from the group consisting of: butyric acid, sodium butyrate, sodium propionate, magnesium butyrate, tributyrin and phenyl-butyrate, their derivatives or salts thereof, are added to the cell culture medium of said cell line, characterized in that at least 95% of the total urokinase is catalytically active two chain urokinase (tc-uPA).

82. (previously presented) A process according to Claim 81 wherein said eukaryotic cell line is selected from CHO and CHO-Messi.

83. (previously presented) A process according to Claim 81 wherein said cell culture medium is serum-free.

84. (previously presented) A process according to Claim 81 wherein the concentration of said alkanoic acids is from 0.1 to 20 mM.

85. (previously presented) A process according to Claim 81 wherein after said alkanoic acids are added, the cell line is grown at a temperature from 30°C to 37°C.

86. (previously presented) A process according to Claim 85

wherein said temperature is from 33°C to 35°C.

87. (previously presented) A process according to Claim 85 wherein said cell line is grown for a time of 48 to 200 hours.

88. (previously presented) A process according to Claim 81 further comprising a step of recovery of said cell culture medium.

89. (previously presented) A process according to Claim 88 wherein the production level of tc-uPA in said cell culture medium is at least 4000 IU/ml.

90. (previously presented) A process according to Claim 88 wherein, said culture medium is acidified with a weak acid to a pH from 5.0 to 5.8, and optionally a non-ionic detergent is added and the culture medium is then filtered.

91. (canceled)

92. (canceled